RESPONSIVENESS SUMMARY CONCERNING EPA=S DECEMBER 29, 2000 PUBLIC NOTICE PROPOSING TMDLs FOR A NUMBER OF WATERS IN THE STATE OF GEORGIA*

*** EXCLUDING THE PROPOSED ZINC TMDL FOR EASTANOLLEE CREEK WHICH WILL BE ADDRESSED IN A SEPARATE DOCUMENT**

Public Participation Activity Conducted:

On December 29, 2000, EPA Region 4 published an abbreviated public notice in the legal advertising section of the Atlanta Journal Constitution. Additionally, Region 4 mailed copies of a detailed public notice to the Georgia Environmental Protection Division (EPD), the Plaintiffs in the Georgia total maximum daily load (TMDL) lawsuit against EPA (Sierra Club et al. v. John Hankinson et al., Civil Action 1:94-cv-2501-MHS), and persons, identified as potentially interested parties, on a mailing list maintained by Region 4. This public notice requested comments from the public on EPA's proposed TMDLs for the following water quality limited segments and pollutants of concern:

WATERBODY NAME	POLLUTANT OF CONCERN
CHATTOOGA RIVER WATERSHED	
Stekoa Creek (from upstream of Clayton, Georgia area to Chattooga - Rabun County)	sediment
Scott Creek (Rabun County)	sediment
Saddle Gap Creek (Rabun County)	sediment
Pool Creek (Rabun County)	sediment
Chechero Creek (Rabun County)	sediment
Warwoman Creek (from source to Black Diamond Road - Rabun County)	sediment
Law Ground Creek (Rabun County)	sediment
Roach Mill Creek (Rabun County)	sediment
SAVANNAH RIVER BASIN	
Eastanollee Creek (Toccoa to Lake Hartwell)	zinc

Matters on Which Public Was Consulted:

As a result of settlement negotiations in the Georgia TMDL lawsuit against EPA (Sierra Club et al. v. John Hankinson et al., Civil Action 1:94-cv-2501-MHS), EPA had the following commitment:

> AOn or before December 31, 2000, EPA shall propose TMDLs to address sediment for all waters identified in the Chattooga Basin report as impaired, including those waters described as threatened. ... EPA agrees that it will take final action on any TMDL required by this Order on Consent within 120 days following EPA=s proposal of the TMDL.@

The public was consulted on proposed, TMDLs for 9 water quality limited segments and pollutants of concern located in the State of Georgia. EPA Region 4 had received and evaluated water quality-related data and information about these waters and the pollutant and had prepared documents supporting the preliminary determinations of these evaluations.

Summary of Public's Comments:

Several people contacted the EPA Region 4 offices, during the public comment period, to request information. The following is a brief summary of those contacts by the public:

1. Pam Burnett
   Jordan, Jones & Goulding, Inc.
   6801 Governors Lake Parkway
   Norcross, Georgia 30071
   January 2, 2001

   requested a copy of the proposed zinc TMDL for Eastanollee Creek

2. Chattooga Conservancy, Inc.
   Post Office Box 2006
   Clayton, Georgia 30525
   January 30, 2001

   requested information about electronic submittal of comments

The following persons provided written comments during the public comment period:

1. Frank Carl
   14501 Smith Road
   Charlotte, North Carolina 28273
   January 30, 2001

2. Alan W. Hallum, Chief
Water Protection Branch
Georgia Environmental Protection Division
4220 International Parkway, Suite 101
Atlanta, Georgia 30354
January 30, 2001

3. John A. Sibley, III, President
The Georgia Conservancy
1776 Peachtree Street, Suite 400 South
Atlanta, Georgia 30309
January 30, 2001

4. Kesler T. Roberts, Staff Attorney
Georgia Legal Watch
264 North Jackson Street
Athens, Georgia 30601
January 31, 2001

5. Buzz Williams, Executive Director
Chattooga Conservancy
Post Office Box 2006
Clayton, Georgia 30525
January 31, 2001

Agency's Specific Responses in Terms of Modifications of the Proposed Action or an Explanation for Rejection of Proposals Made by the Public:

It should be noted that the aforementioned requests for information, data, documents, etc., were responded to in a timely manner (within 24 hours of the request).

The following are the specific comments, concerning the proposed sediment TMDL for the identified waters in the Chattooga River basin, and EPA=s responses to each of the written comments that were received concerning that proposed TMDL:

COMMENT

The target of 100 tons/sq mi/yr is too high. Data n the TMDL indicate that the natural sediment load to the streams is between 0.02 and 0.05 tons/acre/yr (this translates to 12.5 - 32 tons/sq mi/yr). Assuming that any sediment load has biological consequences in the water, the target should be set at a level to minimize the sediment. 32 tons/sq mi/yr should be attainable with sufficient, riparian buffering capacity and provide more than lip service to best management practices in road maintenance, construction, agriculture, and forestry.

Frank Carl, 14501 Smith Road, Charlotte, North Carolina 28273, January 30, 2001

RESPONSE

Biologically unimpacted streams in the West Fork Watershed of the Chattooga River Basin and Cuttingbone Creek in the Stekoa Creek Watershed were used to develop a target sediment watershed load. A biologically unimpacted stream=s watershed sediment loading rate per area of around 100 tons/year/square mile was developed as an acceptable loading rate. A sediment-loading rate per area of 90 tons/year/square mile was used as the target; this includes a 10 percent margin of safety. A percent reduction TMDL was developed by comparing the impacted watershed=s sediment loading rate to the biologically unimpacted watershed=s sediment loading rate.

COMMENT

Uncertain that a TMDL based on annual sediment rates will be enforceable. An easier TMDL to enforce would be based on weight/land area/storm event.

Frank Carl, 14501 Smith Road, Charlotte, North Carolina 28273, January 30, 2001

RESPONSE

Other expressions for the TMDL such a daily maximum and a low to mean flow instream sediment concentration in mg/l have been included in the TMDL.

COMMENT

It also makes more biological sense to use the single event standard because a single event that delivers a substantial portion of the annual limit would be more devastating to the life in the stream than the same load delivered over several months.

Frank Carl, 14501 Smith Road, Charlotte, North Carolina 28273, January 30, 2001

RESPONSE

Other expressions for the TMDL such a daily maximum and a low to mean flow instream sediment concentration in mg/l have been included in the TMDL.

COMMENT

It would be helpful if units were attached to the equations used to calculate loads. If these are ratios, it would be helpful to know ratios of what to what.

Frank Carl, 14501 Smith Road, Charlotte, North Carolina 28273, January 30, 2001

RESPONSE

Units have been included in the TMDL.

COMMENT

It would be helpful to have the TMDL include an explanation of the rating scales for use support, biological, and RPB habitat.

Frank Carl, 14501 Smith Road, Charlotte, North Carolina 28273, January 30, 2001

RESPONSE

This information is available in the Chattooga River Watershed Sediment TMDL Data Report (USEPA, Region 4, 2000). A brief explanation of the rating scale is also provided in the TMDL document.

COMMENT

It would be helpful for the TMDL to include an estimate of the total acreage of unpaved roads in any of the watersheds. Such an estimate would be helpful in defining the magnitude of the problem.

Frank Carl, 14501 Smith Road, Charlotte, North Carolina 28273, January 30, 2001

RESPONSE

The loading from the roads has been included. Determining the acres of roads is, however, difficult since the widths of roads vary.

COMMENT

A TMDL technical advisory group (TAG) was created in May 2000 and the group meets monthly. The TAG has begun to address the complex issues associated with establishing a sediment TMDL. The Georgia Conservancy and the University of Georgia=s Institute of Ecology plan to summarize the TAG=s comments and present them to EPA and EPD for consideration as a scientifically-defendable process for establishing sediment-related TMDLs for the southeastern United States. The Georgia Conservancy recommends that EPA hold the approval of the final sediment TMDLs until they can be reviewed based on the TAG=s recommendations.

John A. Sibley, III, President, The Georgia Conservancy, 1776 Peachtree Street, Suite 400 South, Atlanta, Georgia 30309, January 30, 2001

RESPONSE

Region 4 has been participating in the Sediment TAG meetings and has found the exchange of information useful. Input from the TAG has been incorporated into the TMDL. The Order on Consent that established the schedule for finalizing this TMDL does not, however, provide any flexibility to EPA in waiting any longer to complete this TMDL. Input from the TAG will be considered for the future sediment TMDL development both in Chattooga Watershed and other sediment TMDLs being completed in Georgia.

COMMENT

Annual loads are not the only appropriate unit of measure. Short-term and acute or daily sediment

impacts need to be addressed. An annual load does nothing to address the impact of construction site point sources of loads.
For these to be valid TMDLs, daily maximum loads are a necessary and appropriate unit of measure. These are needed to allow for implementation and allocation to point sources and to allow for meaningful monitoring.
Kesler T. Roberts, Staff Attorney, Georgia Legal Watch, 264 North Jackson Street, Athens, Georgia 30601, January 31, 2001

RESPONSE
The maximum daily loads for each listed segment in the Chattooga River Watershed were estimated and included in the TMDL.

COMMENT
The Clean Water Act and the Consent Decree require the establishment of daily loads.
Kesler T. Roberts, Staff Attorney, Georgia Legal Watch, 264 North Jackson Street, Athens, Georgia 30601, January 31, 2001

RESPONSE
The maximum daily loads for each listed segment in the Chattooga River Watershed were estimated and included in the TMDL.

COMMENT
The significant and controllable source of the sediment problem is from construction sites that could be individually identified in the TMDLs and must be accounted for in the wasteload allocation. Simply referencing and deferring to the state=s general permit and its hoped for BMP goals, as the TMDL does, do not adequately address this load source.
Kesler T. Roberts, Staff Attorney, Georgia Legal Watch, 264 North Jackson Street, Athens, Georgia 30601, January 31, 2001

RESPONSE
Other potential point sources discharges in the Georgia portion of the listed streams are storm water discharges associated with construction activity. The State of Georgia Department of Natural Resources, Environmental Protection Division has developed a general storm water permit. All existing and new storm water point sources within the State of Georgia, that are required to have a permit, are authorized to discharge storm water associated with construction activity to the waters of the State of Georgia in accordance with the limitations, monitoring requirements and other conditions set forth in Parts I through VII of the Georgia Storm Water General Permit. The permit limitations are established to assure that the storm water runoff from these point source sites does not cause or contribute to the existing sediment impairment. A Comprehensive Monitoring Plan with turbidity monitoring requirements is required to assure any storm water discharge from the site does not cause or contribute to the existing sediment problem.

The Georgia General Storm Water Permit for Construction Activities (Storm Water Permit) was developed to reduce the input of sediment from construction activities. In the Upper Stekoa Creek Watershed, based on the available mid 1990s landuse information, it was estimated that, absent the limitations established by the Storm Water Permit, construction would contribute 450 tons/square-mile/year to the stream sediment load. Implementation of the Storm Water Permit in the Upper Stekoa Creek Watershed, which has the highest contribution from construction activities, should reduce the sediment contributed by these construction activities to 55 tons/square-mile/year (0.45 lbs/day/acre), which is below the target of 90 tons/square-mile/year. This reduced load would be less than 1% of the total sediment allowable load for the Upper Stekoa Creek Watershed.

The Georgia General Storm Water Permit can be considered to be a water quality-based permit, in that the numeric limits in the permit, if met and enforced, will not cause a water quality problem in a unimpaired stream or contribute to an existing problem in an impaired stream. It is recommended that for impaired watersheds, the cold water (trout stream) turbidity table be used.

COMMENT

Construction sites must be handled as any other point sources in the TMDL program. That would include allocation of specific loads and limits in each permit as needed based on available in-stream capacity, and, where no capacity exists, permit denial. Each general permit application (or Notice of Intent) should be rejected when no capacity for sediment loading exists. Where there is some capacity, the permit should establish appropriate waterbody-specific limits and those limits should be enforced. There must also be enforceable means to prohibit variances on buffer standards.

Kesler T. Roberts, Staff Attorney, Georgia Legal Watch, 264 North Jackson Street, Athens, Georgia 30601, January 31, 2001

RESPONSE

EPA also assumes that construction activities in the watershed will be conducted in compliance with Georgia=s Storm Water General Permit for construction activities, including discharge limitations and monitoring requirements contained in the General Storm Water Permit.

The wasteload allocation component of this TMDL reflects the following additional assumptions:

No NPDES point source will be authorized to increase its mass loadings of sediment above levels reflected in current water quality-based effluent limitations or allowed in the State=s General Storm Water Permit.

The permitting authority will establish the shortest reasonable period of time for compliance with permit limitations and conditions based on this TMDL.

These assumptions provide reasonable assurance that the allocation of loads in this TMDL, described in more detail below, are appropriate. During Phase 1 of this TMDL, EPA and Georgia will gather data and information to determine whether continued reliance on these assumptions is reasonable. The Phase 2 TMDL may revise the allocation of the allowable load, as necessary, should EPA or Georgia be required to change the assumptions underlying that allocation.

COMMENT

The connection between the STP point sources and sediment problems also needs further discussion. If the stream is already overloaded with solids, then there is no available capacity, and point sources must be reduced. It may be impractical to set the STP=s limits unreasonably low or prohibit the discharge, the limits could be lowered, or at the very least any increase in load (plant expansion) should be prohibited.

Kesler T. Roberts, Staff Attorney, Georgia Legal Watch, 264 North Jackson Street, Athens, Georgia 30601, January 31, 2001

RESPONSE

The sewage treatment plant discharge at its design flow contributes 0.05% of the total sediment load. Further actions at this facility to reduce its sediment load would not result in a measurable water quality improvement.

COMMENT

In conjunction with controlling general and individual permits for construction storm water, prohibiting new connections or expansions of STP=s is another means to get the attention and support of stakeholders and hopefully bring excessive sediment problems under control. Consideration of these kinds of secondary and cumulative impacts should become part of the TMDL process.

Kesler T. Roberts, Staff Attorney, Georgia Legal Watch, 264 North Jackson Street, Athens, Georgia 30601, January 31, 2001

RESPONSE

No NPDES point source will be authorized to increase its mass loadings of sediment above levels reflected in current water quality-based effluent limitations or allowed in the State=s General Storm Water Permit.

COMMENT

The sediment TMDLs lack reasonable assurance of attaining water quality standards and protecting uses in the foreseeable future, if ever. Therefore, these do not meet the minimum requirements of the Clean Water Act and the TMDL regulations.

Kesler T. Roberts, Staff Attorney, Georgia Legal Watch, 264 North Jackson Street, Athens, Georgia 30601, January 31, 2001

RESPONSE

The allocations in this TMDL reflect the following assumptions regarding ongoing watershed restoration and/or pollution control activities in the Chattooga watershed:

The United States Forest Service manages about 70% of the Chattooga watershed. EPA assumptions regarding activities on Forest Service lands include:

Restoration activities, including but not limited to maintenance and rehabilitation of roads and trails, will continue under the Chattooga Watershed Large-Scale Watershed Restoration Project, funded by the U.S. Forest Service.

Private contractors will continue to be required to use Georgia=s Best Management Practices for forestry activities (including road building and/or maintenance) undertaken on U.S. Forest Service lands in the watershed.

Forest Service research activities to evaluate the effectiveness of the Georgia BMPs will continue and will provide information that can be considered in Phase 2 of the TMDL.

EPA also assumes that construction activities in the watershed will be conducted in compliance with Georgia=s Storm Water General Permit for construction activities, including discharge limitations and monitoring requirements contained in the General Storm Water Permit.

The wasteload allocation component of this TMDL reflects the following additional assumptions:

No NPDES point source will be authorized to increase its mass loadings of sediment above levels reflected in current water quality-based effluent limitations or allowed in the State=s General Storm Water Permit.

The permitting authority will establish the shortest reasonable period of time for compliance with permit limitations and conditions based on this TMDL.

These assumptions provide reasonable assurance that the allocation of loads in this TMDL, described in more detail below, are appropriate. During Phase 1 of this TMDL, EPA and Georgia will gather data and information to determine whether continued reliance on these assumptions is reasonable. The Phase 2 TMDL may revise the allocation of the allowable load, as necessary, should EPA or Georgia be required to change the assumptions underlying that allocation.

COMMENT

If it is not the case that other TMDLs are forthcoming for fecal coliform, mercury, and other pollutants, the commenter strongly supports monitoring of all surface waters for any other potential detrimental agents of pollution, and formulating meaningful TMDLs for these.

Buzz Williams, Executive Director, Chattooga Conservancy, Post Office Box 2006, Clayton, Georgia 30525, January 31, 2001

RESPONSE

TMDLs are developed for pollutants on the State=s ' 303(d) list of impaired waters. This comment will be directed to the State to consider as they develop priorities for water quality monitoring in the State.

COMMENT

If monitoring and documentation for other possible pollutants have been done with no proposed 303(d) listings for such pollutants, the commenter requests all pertinent data gathered in this process as a matter of compliance with the Freedom of Information Act.

Buzz Williams, Executive Director, Chattooga Conservancy, Post Office Box 2006, Clayton, Georgia 30525, January 31, 2001

RESPONSE

This comment should be directed to the State for a response and consideration in the development of the next ' 303(d) list.

COMMENT

Concerned that the chosen method of measuring sediment loads based on annual rates is not a meaningful or valid methodology and would not produce the required results of the TMDL initiative. Strongly supports a method of daily sediment load determinations. Measuring annual sedimentation loads would lead to unenforceable mitigation measures because the annual lump sum would mask individual point sources of sedimentation as well as the sedimentation generated by distinct, catastrophic storm events. Secondly, an annual measurement would minimize the more significant biological effects of a particularly heavy sediment load generated from any given daily event. An effective TMDL program will only result from effective monitoring and enforcement of total maximum DAILY loads, especially when some of the subject streams need as much as a 77% reduction in sediment loads to meet the target for a healthy stream. Thus, it seems unlikely that sediment reduction, a most vital component of the TMDL program, could be realized without knowing who the polluters are. This can only be determined on a daily basis at the time of violation.

Additionally, the annual method of monitoring and sediment load calculation would mask events such as a major spill from a sewage treatment plant, which on any given day could devastate stream life. It is also important to note here that the City of Clayton=s sewage treatment plant, which discharges directly into Stekoa Creek, also receives large quantities of storm water runoff during periodic Agully-washers.@ This situation has caused the plant to over flow with some major sewage spills, which inevitably wind up in the Chattooga River in addition to the massive amounts of sediment that Stekoa Creek regularly transports.

Buzz Williams, Executive Director, Chattooga Conservancy, Post Office Box 2006, Clayton, Georgia 30525, January 31, 2001

RESPONSE

The daily loads for each listed segment in the Chattooga River Watershed were estimated and included in the TMDL. Additional expressions of the TMDL such a low to mean flow instream sediment concentration in mg/l have also been included in the TMDL.

COMMENT

Concerned about the lack of attention to identifying specific point sources of sedimentation such as permitted commercial ground disturbing activities, which are discounted due to Georgia=s new Stormwater General Permit system. The commenter=s experience with local enforcement of Georgia=s erosion and sedimentation mitigation guidelines provides absolutely no reassurance that a AComprehensive Monitoring Plan@ would be effectively implemented and/or prevent exacerbation of existing sediment problems. In fact, experience convinces the commenter that these aforementioned point sources are much more significant than noted in the EPA=s ASediment Sources@ discussion.

Buzz Williams, Executive Director, Chattooga Conservancy, Post Office Box 2006, Clayton, Georgia 30525, January 31, 2001

RESPONSE

EPA also assumes that construction activities in the watershed will be conducted in compliance with Georgia=s Storm Water General Permit for construction activities, including discharge limitations and monitoring requirements contained in the General Storm Water Permit.

The wasteload allocation component of this TMDL reflects the following additional assumptions:

No NPDES point source will be authorized to increase its mass loadings of sediment above levels reflected in current water quality-based effluent limitations or allowed in the State=s General Storm Water Permit.

The permitting authority will establish the shortest reasonable period of time for compliance with permit limitations and conditions based on this TMDL.

These assumptions provide reasonable assurance that the allocation of loads in this TMDL, described in more detail below, are appropriate. During Phase 1 of this TMDL, EPA and Georgia will gather data and information to determine whether continued reliance on these assumptions is reasonable. The Phase 2 TMDL may revise the allocation of the allowable load, as necessary, should EPA or Georgia be required to change the assumptions underlying that allocation.

COMMENT

The proposed TMDLs= proposed solution to wildly excessive sedimentation is based on adhering to Best Management Practices (BMPs). However, BMPs have been in place for some time, and have obviously failed to achieve a reduction in sedimentation in the past. Thus, it is grossly unrealistic and simply invalid to identify the current BMP program as a panacea for preventing and/or reducing sediment.

Buzz Williams, Executive Director, Chattooga Conservancy, Post Office Box 2006, Clayton, Georgia 30525, January 31, 2001

RESPONSE

See previous response.

COMMENT

There are a number of oversights in the proposed TMDL that are troubling, given the gravity of the TMDL program. For instance, on page 3 appears the statement APrevious reports such as the *Sedimentation in the Chattooga River Watershed* (by Van Lear) report concluded that the Chattooga River watershed was the watershed in the Chattooga basin most impacted by sedimentationY@. Such meaningless redundancy diminishes the commenter=s confidence in the EPA=s analysis.

Buzz Williams, Executive Director, Chattooga Conservancy, Post Office Box 2006, Clayton, Georgia 30525, January 31, 2001

RESPONSE

Comment noted.

COMMENT

On page 12 under the paragraph headings for Law Ground Creek, Upper Warwoman Creek and Round Mill Creek, each of the discussions reference only Pool Creek. The commenter interprets this to be a mistake in the Afill in the blank@ template, but such mistakes reflect poorly on the EPA=s attention to detail.

Buzz Williams, Executive Director, Chattooga Conservancy, Post Office Box 2006, Clayton, Georgia 30525, January 31, 2001

RESPONSE

Comment noted and report errors have been corrected.

COMMENT

On page 35, under AProtocol for Developing Sediment TMDLs,@ several acronyms are undefined. All of the mentioned oversights hinder meaningful citizen comprehension and comment, as well as indicate a lack of depth necessary for such an important initiative.

Buzz Williams, Executive Director, Chattooga Conservancy, Post Office Box 2006, Clayton, Georgia 30525, January 31, 2001

RESPONSE

The document *A Protocol for Developing Sediment TMDLs*, was and is available in the administrative record. The definitions of the acronyms can be found in that document.

COMMENT

The proposed TMDLs, which are not expressed in the context of *daily* loads, fail to address requirements of the Clean Water Act. Further, the TMDLs do not attempt to address both point and non point sources. The commenter is very concerned that the proposed method of sediment reduction is focused on BMPs, which have been totally inadequate in past efforts to control and reduce erosion and sedimentation. Finally, the TMDL process seems rushed and poorly addressed, given that the Clean Water Act=s guiding legislation has been around for quite some time. The commenter strongly urges the EPA to revisit the TMDL process in the State of Georgia to address these oversights.

Buzz Williams, Executive Director, Chattooga Conservancy, Post Office Box 2006, Clayton, Georgia 30525, January 31, 2001

RESPONSE

The daily loads for each listed segment in the Chattooga River Watershed were estimated and included in the TMDL.

Description of the Effectiveness of the Public Participation Program:

The public participation process in the matter of EPA's establishment of total maximum daily loads for pollutants and waters in the State of Georgia was considered to be an important one. The number of comments received from the public, including local organizations, demonstrated that the opportunity for public participation in this matter was effective.